

IN THE DRAWINGS

Please cancel Figs. 3A and 3B.

Please renumber FIG. 4A as FIG. 3A, and renumber FIG. 4B as FIG. 3B.

REMARKS

The Examiner is thanked for the thorough examination of this application. The Office Action, however, continued to reject all pending claims. Applicant has amended this application to place it in condition for allowance.

Drawing Objections

The Office Action objected to the drawings. While Applicant does not agree with this objection, Applicant has nevertheless decided to accommodate the objection by canceling FIGs. 3A and 3B. FIGs. 4A and 4B have been correspondingly renumbered at 3A and 3B.

Response to Rejections Under 35 U.S.C. §112

The Office Action rejected claims 1 and 11 under 35 U.S.C. § 112, first paragraph. Claims 1 and 11 are amended herein to redefine the basic cell structure according to Fig. 3B (original FIG. 4B), wherein “each basic cell structure comprises **three** unique colors of first, second, third and fourth light emitting diodes” is correct.

Page 5, lines 20 and 21 of the specification is amended for consistency with amended claim 1. Thus, “each basic cell structure **comprises** three unique colors of first, second, third and fourth light emitting diodes, arranged in a quadrilateral” is described in the specification.

The Office Action also rejected claims 1, 2, 7, 9-12, 17, 19, and 20 under 35 U.S.C. § 112, second paragraph. These rejections have been rendered moot by the amendments to claims 1 and 11.

Response to Rejections Under 35 U.S.C. §102

Turning now to the substantive rejections, the Office Action rejected claims 1, 2, 9, 11, 12, and 19 under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. patent 6,856,087 to Lin. As amended, independent claim 1 defines:

1. A backlight unit for a liquid crystal display, comprising:
a light source comprising:
a plurality of basic cell structures, *wherein each basic cell structure, comprising:*
three unique colors of first, second, third and fourth light emitting diodes, arranged in a quadrilateral;
wherein two of the first, second, third and fourth light emitting diodes are green.

(*Emphasis added*). Claim 1 patently defines over the cited art for at least the reasons that the cited art fails to disclose the features emphasized above.

As emphasized above, claim 1 defines a backlight unit for a liquid crystal display comprising a light source. The light source further comprises a plurality of basic cell structures. **Each** basic cell structure comprises three unique colors of first, second, third and fourth light emitting diodes, arranged in a **quadrilateral**. Two of the first, second, third and fourth light emitting diodes are green. However, as taught by Fig. 5H in Lin et al, three colors LEDs (red, green and blue) arranged in a triangle. Therefore, significantly, even if the LEDs of Lin et al can form a plurality of quadrilaterals, **each quadrilateral does NOT comprise two green LEDs**, as specifically claimed by claim 1. For at least this reason, claim 1 is not anticipated by Lin et al.

Independent claim 11 has been similarly amended to define a liquid crystal display comprising a backlight unit and a light source. The light source comprises a plurality of basic cell structures. **Each** basic cell structure comprises three unique colors of first, second, third and fourth light emitting diodes, arranged in a **quadrilateral**. Two of the first, second, third and

fourth light emitting diodes are green. Again, Lin does not teach the arrangement of LEDs in a quadrilateral configuration, and certainly does not teach that the LEDs can form a plurality of quadrilaterals, with **each quadrilateral comprises two green LEDs**. Thus, claim 11 is not anticipated by Lin et al.

As independent claims 1 and 11 each define over the cited reference, all claims (at least by virtue of their dependency) define over the cited art.

As a separate and independent basis for the patentability of claims 10 and 20, Applicants respectfully submits that the Office Action has failed to cite a proper motivation or suggestion for combining the Lin and Frank references. For example, in combining *Lin* and *Frank*, the Office Action stated only that the combination would have been obvious “in order to control the light rays incident on an operative area.” (Office Action, p. 6.) This alleged motivation is clearly improper in view of well-established Federal Circuit precedent.

It is well-settled law that in order to properly support an obviousness rejection under 35 U.S.C. § 103, there must have been some teaching in the prior art to suggest to one skilled in the art that the claimed invention would have been obvious. W. L. Gore & Associates, Inc. v. Garlock Thomas, Inc., 721 F.2d 1540, 1551 (Fed. Cir. 1983). More significantly,

"The consistent criteria for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this [invention] should be carried out and would have a reasonable likelihood of success, viewed in light of the prior art. ..." Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure... In determining whether such a suggestion can fairly be gleaned from the prior art, the full field of the invention must be considered; for the person of ordinary skill in the art is charged with knowledge of the entire body of technological literature, including that which might lead away from the claimed invention."

(*Emphasis added.*) In re Dow Chemical Company, 837 F.2d 469, 473 (Fed. Cir. 1988).

In this regard, Applicants note that there must not only be a suggestion to combine the functional or operational aspects of the combined references, but that the Federal Circuit also requires the prior art to suggest both the combination of elements and the structure resulting from the combination. Stiftung v. Renishaw PLC, 945 Fed.2d 1173 (Fed. Cir. 1991). Therefore, in order to sustain an obviousness rejection based upon a combination of any two or more prior art references, the prior art must properly suggest the desirability of combining the particular elements to derive a backlight module, as claimed by the Applicants.

When an obviousness determination is based on multiple prior art references, there must be a showing of some “teaching, suggestion, or reason” to combine the references. Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1579, 42 USPQ2d 1378, 1383 (Fed. Cir. 1997) (also noting that the “absence of such a suggestion to combine is dispositive in an obviousness determination”).

Evidence of a suggestion, teaching, or motivation to combine prior art references may flow, inter alia, from the references themselves, the knowledge of one of ordinary skill in the art, or from the nature of the problem to be solved. See In re Dembiczak, 175 F.3d 994, 1000, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be “clear and particular.” Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617.

If there was no motivation or suggestion to combine selective teachings from multiple prior art references, one of ordinary skill in the art would not have viewed the present invention as obvious. See In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998);

Gambro Lundia AB, 110 F.3d at 1579, 42 USPQ2d at 1383 (“The absence of such a suggestion to combine is dispositive in an obviousness determination.”).

Significantly, where there is no apparent disadvantage present in a particular prior art reference, then generally there can be no motivation to combine the teaching of another reference with the particular prior art reference. Winner Int'l Royalty Corp. v. Wang, No 98-1553 (Fed. Cir. January 27, 2000).

For at least this additional reason that the Office Action failed to identify proper motivations or suggestions for combining the various references to properly support the rejections under 35 U.S.C. § 103, the rejection of claims 10 and 20 should be withdrawn.

CONCLUSION

For at least the reasons described above, independent claims 1 and 11 are allowable over the cited references. Insofar as the independent claims define over the cited art, the remaining (dependent) claims patently define over the cited art as well.

Should Examiner feel that further discussion of the application and the Amendment is conducive to prosecution and allowance thereof, please do not hesitate to contact the undersigned at the address and telephone listed below.

No fee is believed to be due in connection with this Amendment and Response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Respectfully submitted,

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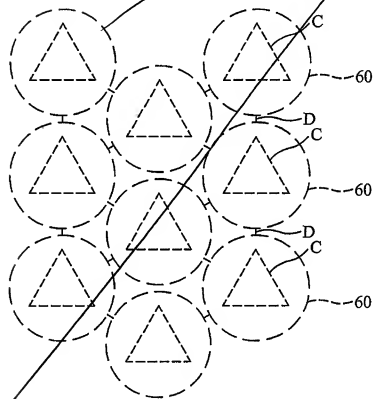


FIG. 3A

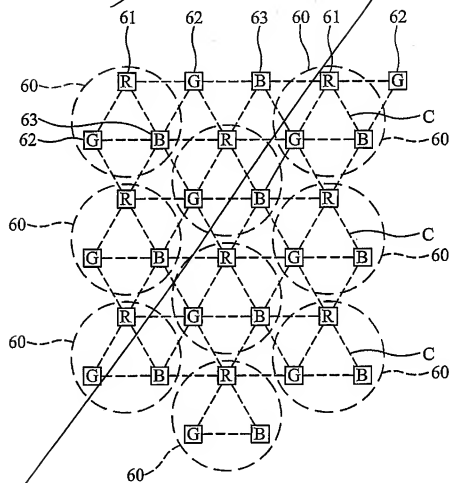


FIG. 3B

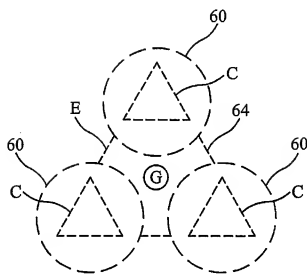


FIG. ~~4A~~ 3A

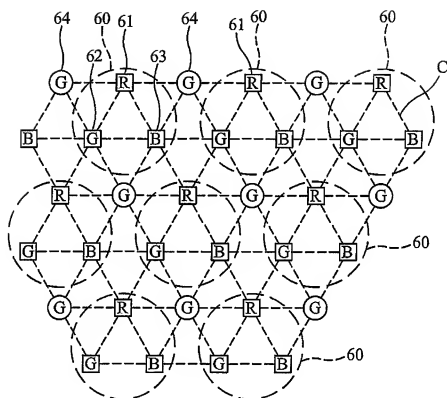


FIG. ~~4B~~ 3B